

MICAL', S.P., kand.ekon.nauk; ABRAMOVA, A.F., kand.ekon.nauk
(Dnepropetrovsk); GRISHBL', Ye.P., inzh.; DUMAYEV, N.I., inzh.
(stantsiya Kuybyshevka-Vostochnaya)

How to improve the system of economic accountability in classification yards. Zhel.dor.transp. 40 no.4:38-41 Ap '58.
(MIRA 13:4)

(Railroads--Accounts, bookkeeping, etc.)

MI(AL', Stepan Pavlovich; CHERNYSHEV, V.I., red.; BOBROVA, Ye.N., tekhn.
red.

[Wages in railroad transportation] Zarabotnaya plata na zhelezno-
dorozhnom transporte. Moskva, Gos. transp. zhel.-dor. izd-vo,
1958. 53 p. (MIRA 11:4)
(Wages) (Railroads)

MICAL', S. P.

Wages of the railroad transportation system (by occupations) Moskva, Transzheldorizdat,
1951. 87 p. (Ekonomicheskaya biblioteka zheleznodorozhnika)

MIGAL', P.K.; PLOAYE, K.I.

Complex compounds of silver with ethanolamine in water-alcohol solutions. Zhur.neorg.khim. 10 no.11:2517-2521 N '65.
(MIRA 18:12)

1. Kishinevskiy gosudarstvennyy universitet. Submitted April 21, 1964.

MIGAL', P.K.; SEROVA, G.F.

Complex formation of cadmium with monoethanolamine in water-methanol solutions. Zhur.neorg.khim. 10 no.11:2513-2516 N '65.
(MIRA 18:12)

1. Kafedra fizicheskoy khimii Kishinevskogo gosudarstvennogo universiteta. Submitted April 11, 1964.

MIGAL', P.K.; SEROVA, G.F.

Polarographic study of the complex formation of cadmium with
triethanolamine in water ethanol solutions. Zhur. neorg. khim.
10 no.3:615-618 Mr '65. (MIRA 18:7)

1. Kishinevskiy gosudarstvennyy institut.

ILLEGIBLE

MIGAL', P.K., prof.; KARDIVARENKO, M.A., doctant; KRENIS, G.A.

New adsorbent from mineral raw materials of Moldavia. Vkh. zap.
Kish. un. 68:97-99 '63 [cover '64]. (MEPA 18:12)

MIGAL', P.K., prof.

Adsorption of vapor mixtures. Uch.zap.Kish.un. 68:7-14
'63 [cover '64]. (MIRA 18:12)

SYCHEV, A.Ya.; GERBELEU, A.P.; MIGAL', P.K.

Thermodynamics of a stepped complex formation of nickel ions with
triethanolamine. Zhur.neorg.khim. 8 no.9:2070-2073 S '63.
(MIRA 16*10)

MIGAL', P.K.; TSIPLYAKOVA, V.A.

Complex formation of cadmium with thiourea in water-ethanol solutions.
Zhur.neorg.khim. 8 no.3:629-633 Mr '63. (MIRA 16:4)

1. Kishinevskiy gosudarstvennyy universitet. (Urea)
(Cadmium compounds)

SYCHEV, A.Ya.; MIGAL', P.K.; Prinimali uchastiye: TIMONINA, L.I.; MIGAL', Ye.P.;
YERMOLENKO, P.P.

Stability of complex compounds of some metals with phenylalanine,
lysine and tyrosin. Biokhimiia 27 no.1:25-31 Ja-F '62. (MIRA 15:5)

1. State University, Kishinev.
(ALANINE) (LYSINE) (TYROSIN) (ORGANOMETALLIC COMPOUNDS)

MIGAL', P.K.; GRINBERG, N.Kh.

Complex formation of cadmium, lead, and zinc ions with formamide in water - methyl alcohol and water - ethyl alcohol solutions. Zhur.neorg.khim. 7 no.6:1309-1312 Je '62. (MIRA 15:6)

1. Kishinevskiy gosudarstvennyy universitet, kafedra fizicheskoy khimii.

(Complex compounds) (Formamide)

MIGAL', P.K.; GRINBERG, N.Kh.

Resolution of cadmium and lead ions in acetone-aqueous and
acetone-alcoholic solutions. Zhur.neorg.khim. 7 no.3:531-535
Mr '62. (MIRA 15:3)

1. Kishinevskiy gosudarstvennyy universitet.
(Metal ions) (Solvation)

MIGAL', P.K.; GRINBERG, N.Kh.

Study of the resolution of certain metal ions in nonaqueous
systems by the polarographic method. Zhur.neorg.khim. 7
no.3:527-530 Mr '62. (MIRA 15:3)

1. Kishinevskiy gosudarstvennyy universitet.
(Metal ions) (Solvation)

MIGAL', P.K.; GRINBERG, N.Kh.

Use of the polarographic method in the study of the hydration of
certain ions in methanol solutions. Zhur. neorg. khim. 6
no.3:727-731 Mr '61. (MIRA 14:3)

1. Kishinevskiy gosudarstvennyy universitet.
(Hydration)
(Ions)

The Study of Hydrogen and Oxygen Absorption
and Their Reaction on Platinum

82000
S/076/60/034/06/01/040
B015/B067

A. I. Shlygin, A. N. Frumkin, S. Z. Roginskiy, Ye. I. Shuf'its, and
Zel'dovich are mentioned in the text. There are 9 figures and 9 refer-
ences: 7 Soviet, 1 Japanese, and 1 German.

ASSOCIATION: Kishinevskiy gosudarstvennyy universitet
(Kishinev State University)

SUBMITTED: September 6, 1955

Card 3/3

The Study of Hydrogen and Oxygen Adsorption and Their Reaction on Platinum

21562
S/076/60/034/06/01/040
B015/B061

curves by charge curves. It was established that the adsorption of hydrogen on unpoisoned platinum is of the zeroth order. An addition of KCN alters the form of the kinetic isothermal line (Fig. 3), so that the straight line (of the zeroth order) is converted into a curve of the first order. Arsenic is apparently not selectively distributed on the platinum surface, poisons the centers of adsorption, but does not destroy the mobility of hydrogen on the platinum surface. Mercury weakens the surface diffusion of hydrogen, whilst the CN ions act as a selectively blocking poison, and impede the surface diffusion of hydrogen. The oxygen adsorption on poisoned and pure platinum can be described by the Benham-Bart equation. The effect of the poisons decreases in the order $CN' > Hg > As$. Tests of the reaction between adsorbed hydrogen and molecular oxygen led to the assumption that the reaction rate is determined by the number of collisions of oxygen molecules with the hydrogen-saturated platinum surface on a redistribution of hydrogen. A similar mechanism, but without hydrogen redistribution, is assumed for the reaction between adsorbed oxygen and molecular hydrogen. Arsenic and mercury delay the reaction, whilst CN ions accelerate it. In the presence of all three additions the reaction follows the first order.

Card 2/3

815
S/076/60/034/06/01/040
B015/B061

5.1190

AUTHORS:

Migal', P. K., Tsiplyakova, V. A. (Kishinev)

TITLE:

The Study of Hydrogen and Oxygen Adsorption and Their Reaction on Platinum

PERIODICAL:

Zhurnal fizicheskoy khimii, 1960, Vol. 34, No. 6, pp. 1153-1160

TEXT: The kinetics of hydrogen and oxygen adsorption and the reaction occurring in the surface layer of platinum in the presence of arsenic, mercury, and cyanide ions was studied. The tests took place in three series, and the catalyst electrode used was prepared by electrochemical depositing of platinum black onto a Pt lamina. Solutions of 0.1 N sulfuric acid or 0.1 N soda lye were used as electrolyte, from which oxygen was removed by saturation with nitrogen. The electrode was poisoned with As_2O_3 or $HgCl_2$ solution in an H_2SO_4 solution, and in NaOH solution with CN ions. Potential - time curves were obtained from the kinetic tests, which were reduced to "quantity of adsorbed gas - time"

Card 1/3

69053

Complex Compounds of Cadmium With Monoethanol Amine,
Diethanol Amine, and Triethanol Amine

S/078/60/005/03/018/048
B004/B002

of the reaction of Cd with mono-, di- and triethanol amine. The authors found 5 monoethanol amine complexes of Cd with the coordination indices of 1 - 5 and three di- and triethanol amine complexes with coordination indices of 1 - 3. The instability constants computed according to Deford, Hume and Yatsimirskiy are shown by table 3. The increasing content of ethanol radicals has no influence on the stability of the complexes. There are 4 figures, 3 tables, and 13 references, 7 of which are Soviet. ✓

ASSOCIATION: Kishinevskiy gosudarstvennyy universitet
(Kishinev State University)

SUBMITTED: October 26, 1958

Card 2/2

5.2620
AUTHORS:Migal', P. K., Fushnyak, A. N.

69053

S/078/60/005/03/018/048
B004/B002

TITLE:

Complex Compounds of Cadmium With Monoethanol Amine, Diethanol Amine, and Triethanol Amine

PERIODICAL:

Zhurnal neorganicheskoy khimii, 1960, Vol 5, Nr 3, pp 610-614 (USSR)

ABSTRACT:

The authors first give some data on the complex formation of ethanol amines and mention I. A. Korshunov and L. V. Lipatova (Ref 2) et al. They investigated the reaction of cadmium and ethanol amines within a very wide range. The investigation was carried out polarographically, with D. D. Deford's and D. N. Hume's (Ref 5) and also K. B. Yatsimirskiy's (Ref 9) computation methods being applied. $\text{Cd}(\text{NO}_3)_2$ (10^{-4} mole/l) was brought into reaction with ethanol amines, while the concentration of mono- and diethanol amines was varied within 0.01 - 5.0 moles/l, and that of triethanol amines within 0.01 - 1.0 mole/l. The background used was 0.1 mole KNO_3 . Half-wave potentials were measured by means of the polarograph type SGM-8 of the zavod Geolograzvedka (Works of Geological Research). Table 1 gives the measuring results, table 2 the pH values. As is shown by figure 1, the process takes place in stages. Figures 2-4 give the J. Leden functions (Ref 10)

Card 1/2

The Polarographic Behavior of Metal Ions in
the System Acetic Acid - Water

SOV/79-29-1-3/74

The polarographic characteristics of the ions Cd^{++} , Zn^{++} , Ni^{++} were investigated in the system $\text{CH}_3\text{COOH}-\text{H}_2\text{O}$. Diagrams were plotted concerning the relation between diffusion current and composition of the solvent. It was shown that the variation of the constant of diffusion current is accompanied by clear curvatures in a section of the acid concentration corresponding to the formation of the hydrate complexes. This variation depends upon the composition of the solvent. There are 6 figures, 1 table, and 6 Soviet references.

ASSOCIATION: Kishinevskiy gosudarstvennyy universitet (Kishinev State University)

SUBMITTED: October 21, 1957

Card 2/2

AUTHOR: Migal', P. K., Agas'yeva, V. G. SOV/79-29-1-3/74

TITLE: The Polarographic Behavior of Metal Ions in the System
Acetic Acid - Water (Polyarograficheskoye povedeniye ionov
metallov v sisteme uksusnaya kislota-voda)

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 1, pp 8-11 (USSR)

ABSTRACT: In the previous paper (Ref 1) the behavior of the ions Cd^{++} ,
 Zn^{++} , Pb^{++} in the system formic acid - water was investigated.
The present paper deals with the influence of the composition
of the aqueous acetic solvent upon the polarographic diffusion
current of simple metal ions. The physico-chemical properties
of the binary system $CH_3COOH-H_2O$ were investigated by
A. A. Glagoleva, i.e. viscosity, conductivity, density, sur-
face tension of this system. In this connection it was found
that this system has an irrational character as far as on
the isothermal lines of all investigated physico-chemical
properties within a certain range of acid concentration the
maxima and minima which point out to the formation of the
hydrate complexes $CH_3COOH.H_2O$ and $CH_3COOH.2H_2O$ were determined.

Card 1/2

The Polarographic Behavior of Metal Ions in
the System Formic Acid - Water

SOV/79-29-1-2/74

properties determined in the system $\text{HCOOH-H}_2\text{O}$. There are 6
figures, 1 table, and 12 references, 8 of which are Soviet.

ASSOCIATION: Kishinevskiy gosudarstvennyy universitet (Kishinev State
University)

SUBMITTED: November 21, 1957

Card 3/3

The Polarographic Behavior of Metal Ions in
the System Formic Acid - Water

SOV/79-29-1-2/74

already investigated viscosity, electric conductivity, surface tension, density and fusibility of the binary system $\text{HCOOH} - \text{H}_2\text{O}$ (Refs 1-5). The analysis of the isothermal lines of the system permitted to determine the presence and the composition of two hydrates, i.e. $\text{HCOOH} \cdot \text{H}_2\text{O}$ and $\text{HCOOH} \cdot 2\text{H}_2\text{O}$.

Already A. M. Zan'ko and F. A. Manusova (Ref 8) and other chemists (Refs 9-11) showed that the nature of the solvent exerts an important influence upon the polarographic diffusion current. The authors investigated the polarographic characteristic features of the ions Cd^{++} , Zn^{++} , Pb^{++} in the system $\text{HCOOH} - \text{H}_2\text{O}$. The six diagrams show the dependence of the dif-

fusion current on the concentration of the metal ions. The following diagrams were obtained: the constant of the diffusion current in its dependence on the composition of the solvent. It was shown that the variation of this constant depends upon the composition of the solvent and that it is accompanied by two maxima in the concentration range corresponding to the above-mentioned hydrates. This agrees with the curves of viscosity, electric conductivity and other

Card 2/3

AUTHORS: Migal', P. K., Agas'yeva, V. G. SOV/79-29-1-2/74

TITLE: The Polarographic Behavior of Metal Ions in the System
Formic Acid - Water (Polyarograficheskoye povedeniye ionov
metallov v sisteme murav'inaya kislota-voda)

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 1, pp 3-7 (USSR)

ABSTRACT: The polarographic investigations in mixed solvents are of
great theoretical interest as far as the various physico-
chemical transformations exert an influence upon the electric
reduction process of ions in the media to be investigated.
The application of binary fluid systems as solvents in the
polarographic reduction of metal ions is expected to furnish
valuable investigation material for the determination of the
physico-chemical nature of the medium under investigation,
especially in the case a chemical reaction is assumed to take
place between the components of the system. In this connection
the influence of the composition of the solvent upon the
characteristic polarographic features (especially the diffusion
current) of the simple metal ions was investigated in order
to use the data obtained for the determination of the charac-
teristics of the composition diagrams. A. A. Glagoleva had

Card 1/3

SOV/78-4-8-23/43

The Polarographic Investigation of the Composition and the Stability of the
Cadmium Thiosulphate Complexes in Aqueous Solution

formed. In the case of high ionic strength the complex $[\text{Cd}(\text{S}_2\text{O}_3)_3]^{4-}$ is observed. The stoichiometric instability constant was computed according to various methods (Refs 6,7) and showed good agreement. The instability constant of $\text{Cd}(\text{S}_2\text{O}_3)$ increases with increasing ionic strength. The constants for $[\text{Cd}(\text{S}_2\text{O}_3)]^{2-}$ and $[\text{Cd}(\text{S}_2\text{O}_3)_3]^{4-}$ pass a maximum at $\mu = 1$. The thermodynamical instability constant (Table 3) is in agreement with the values found according to the solubility method (Ref 3). There are 2 figures, 3 tables, and 10 references, 5 of which are Soviet.

ASSOCIATION: Kishinevskiy gosudarstvennyy universitet (Kishinev State University)

SUBMITTED: April 30, 1958

Card 2/2

5(2) SOV/78-4-8-23/43

AUTHORS: Migal', P. K., Grinberg, N. Kh., Tur'yan, Ya. I.

TITLE: The Polarographic Investigation of the Composition and the Stability of the Cadmium Thiosulphate Complexes in Aqueous Solution (Polyarograficheskoye issledovaniye sostava i ustoychivosti tiosul'fatnykh kompleksov kadmiya v vodnom rastvore)

PERIODICAL: Zhurnal neorganicheskoy khimii, 1959, Vol 4, Nr 8, pp 1844-1848 (USSR)

ABSTRACT: The solutions $\text{Cd}(\text{NO}_3)_2 + \text{NaClO}_4 + \text{Na}_2\text{S}_2\text{O}_3$ are investigated at different ionic concentrations which were kept constant in the individual experiments. In order to suppress the maximum 0.01% gelatin was added to the polarographically investigated solutions. Oxygen was removed by the passage of hydrogen. A calomel standard electrode served as comparison cathode. The polarographic measuring results are shown by table 1. The dependence of the potential of the semiwave on the logarithm of the concentration of the thiosulphate ion is shown by figure 1. A step-wise complex formation was observed which the other research workers (Refs 2,4) had neglected. With low ionic strength only the complexes $[\text{Cd}(\text{S}_2\text{O}_3)]$ and $[\text{Cd}(\text{S}_2\text{O}_3)_2]^{2-}$ are

Card 1/2

SOV/78-A-6-20/44

Investigation of the Composition and the Stability of the Complexes of
Copper, Lead, and Zinc With Monoethanol-amine

of the half wave on the complex ions Cu^{2+} , Zn^{2+} , and Pb^{2+} , on the logarithm of the concentration as well as on the monoethanol-amine is given in figures 1 and 3. It was found that copper and zinc with monoethanol-amine form complex compounds with the coordination number $p = 4$. The instability constants of the complexes $[\text{Cu}(\text{MEA})_4]^{2+}$ and $[\text{Zn}(\text{MEA})_4]^{2+}$ amount to $K_{\text{Cu}} = (3.6 \pm 0.7) \cdot 10^{-16}$ and $K_{\text{Zn}} = (1.5 \pm 0.6) \cdot 10^{-10}$. Lead forms with monoethanol-amine a complex with the coordination number $p = 2$ and the instability constant $K_{\text{Pb}} = (3.6 \pm 0.4) \cdot 10^{-8}$.

The dependences of the amount of the diffusion current of Cu and Pb on the concentration of the monoethanol-amine are given in the figures 4 and 5. (MEA = monoethanol-amine). There are 5 figures, 1 table, and 8 references, 6 of which are Soviet.

ASSOCIATION: Kishinevskiy gosudarstvennyy universitet (Kishinev State University)

SUBMITTED: March 18, 1958

Card 2/2

SOV/78-4-6-20/44

5(4)
AUTHORS: Migal', P. K., Pushnyak, A. N.

TITLE: Investigation of the Composition and the Stability of the Complexes of Copper, Lead, and Zinc With Monoethanol-amine (Izucheniye sostava i ustoychivosti kompleksov medi, svintsa i tsinka s monoetanolaminom)

PERIODICAL: Zhurnal neorganicheskoy khimii, 1959, Vol 4, Nr 6, pp 1336-1340 (USSR)

ABSTRACT: The composition and the instability constants of the ethanol-amine complexes of copper, zinc, and lead were determined by the polarographic method. The determinations were carried out with the polarograph SCM-8. The complex formation process of $\text{Cu}(\text{NO}_3)_2$ with monoethanol-amine was investigated in the concentration intervals amine 0.01 - 5.0 mol/l; $\text{Zn}(\text{NO}_3)_2$ - 0.05 - 1.0 mol/l; and $\text{Pb}(\text{NO}_3)_2$ - 0.1 - 5.0 mol/l. The polarographic characteristics of the different elements (Cu^{2+} , Zn^{2+} and Pb^{2+}) in the case of monoethanol-amine being present are given in table 1. It was found that the potential of the half wave shifts towards the negative values with an increase of the concentration of the addend. The dependence of the potential

Card 1/2

The Stability of the Citric-Acid Complexes of Some Metals

78-2-10/43

titrations the following stability constants were found:

$[\text{NiCit}]^{1-}$, $[\text{NiCit}_2]^{4-}$ with $\lg K$ 4,99, 2,77

$[\text{CoCit}]^{1-}$, $[\text{CoCit}_2]^{4-}$ with $\lg K$ 4,41, 2,34

$[\text{ZnCit}]^{1-}$, $[\text{ZnCit}_2]^{4-}$ with $\lg K$ 4,25, 1,91

$[\text{CdCit}]^{1-}$, $[\text{CdCit}_2]^{4-}$ with $\lg K$ 3,38, 1,62

$[\text{NiCi}]^{2-} = \lg K$ 5,27, $[\text{CdCi}]^{2-} = \lg K$ 7,08, $[\text{ZnCi}]^{2-} = \lg K$ 7,44,

$[\text{CdCi}]^{2-} = \lg K$ 6,23 and $[\text{CuCi}]^{2-} = \lg K$ 13,22.

There are 7 figures, 2 tables, and 23 references, 5 of which are Slavic.

ASSOCIATION: **Kishinev State University** (Kishinevskiy gosudarstvennyy universitet)

SUBMITTED: April 2, 1957

AVAILABLE: Library of Congress

Card 2/2

AUTHORS:

Migal', P. K., Sychev, A. Ya.

TITLE:

The Stability of the Citric-Acid Complexes of Some Metals
(Ustoychivost' limonnokislykh kompleksov nekotorykh metallov).

PERIODICAL:

Zhurnal Neorganicheskoy Khimii, 1958, Vol. 3, Nr 2,
pp. 314-324 (USSR)

ABSTRACT:

This work investigated the stability constants of the bivalent metals Ni^{2+} , Co^{2+} , Zn^{2+} , Cd^{2+} , Cu^{2+} with citric acid. The potentiometric method (pH) was employed for determining the stability constant. According to their stability in an acid medium the metals are to be arranged in the following order: $\text{Cu} > \text{Ni} > \text{Co} > \text{Zn} > \text{Cd}$. The influence of the above-mentioned ions upon citric acid in a neutral or alkaline medium is to be expressed by the following equation:

$\text{M}^{2+} + \text{Cit}^{4-} \rightleftharpoons \text{MCit}^{2-}$. The two- or four-fold excess of citric acid in relation to the metal-ions does not influence the stability constant. The stability constant of the complexes was calculated from the titration curves in the ratio metal-ion : addendum = 1 : 1. The third dissociation constant of citric acid $K_3 = 3,24 \cdot 10^{-6}$ was used in the calculation of the stability constant. On the basis of the potentiometric

Physico-Chemical Investigations Concerning the Complex-
-Formation of Zinc, Cadmium and Copper With Sodium Citrate
in an Aqueous Medium.

78-2-9/43

proceeds through a partial dissociation of hydrogen from the
OH of the citrate. In acid solutions these metals also form
complexes of the type $[MCit]^{1-}$. In the system $ZnSO_4 \cdot C_6H_5O_7Na_3$
in concentrated solutions a complex metal : citrate = 1 : 2
also forms. There are 7 figures and 11 references, 5 of which
are Slavic.

ASSOCIATION: Kishinev State University (Kishinevskiy gosudarstvennyy
universitet)

SUBMITTED: April 2, 1957

AVAILABLE: Library of Congress

Card 2/2

AUTHORS:

Migal', P. K., Sychev, A. Ya.

70-2-9/43

TITLE:

Physico-Chemical Investigations Concerning the Complex-Formation of Zinc, Cadmium and Copper With Sodium Citrate in an Aqueous Medium (Fiziko-khimicheskoye issledovaniye kompleksobrazovaniya ionov tsinka, kadmiya, medi s limonno-kislym natriyem v vodnoy srede).

PERIODICAL:

Zhurnal Neorganicheskoy Khimii, 1958, Vol. 3, Nr 2, pp. 309-313 (USSR).

ABSTRACT:

The complex-formation in the system $\text{ZnSO}_4\text{-C}_6\text{H}_5\text{O}_7\text{Na}_3$, $\text{CdCl}_2\text{-C}_6\text{H}_5\text{O}_7\text{Na}_3$ and $\text{CuSO}_4\text{-C}_6\text{H}_5\text{O}_7\text{NO}_3$ in an aqueous medium was investigated by the methods with electrolytic conductivity and potentiometry /pH/. According to the results with electrolytic conductivity in diluted solutions (0,01 - 0,1 mol/l) the complexes metal : addendum = 1 : 1 exist. According to the determination by the optical density in the system $\text{CuSO}_4\text{-C}_6\text{H}_5\text{O}_7\text{Na}_3$ and at pH = 4 the complex copper : citrate = 1 : 1 exists. In weakly-acid solutions the complex-formation in the systems zinc-citrate, cadmium-citrate, copper-citrate

Card 1/2

MIGAL', P.K.; SYOHEV, A.Ya.

Physicochemical analysis of zinc, cadmium, and copper ion complex formation with sodium citrate in aqueous media. Zhur. neorg. khim. 3 no.2:309-313 F '58. (MIRA 11:4)

1. Kishinevskiy gosudarstvennyy universitet.
(Complex compounds) (Sodium citrate)

MIGAL', P.K.; SYCHEV, A.Ya.

Stability of some metal citrate complexes. Zhur. neorg. khim. 3
no.2:314-324 # '58. (MIRA 11:4)

1. Kishinevskiy gosudarstvennyy universitet.
(Complex compounds) (Citrates)

MIGAL', P.K.,

MIGAL', P.K.; TIMOFEYEV, O.A.

Making water glass from tripoli earth by the wet method. Khim.
nauka i prom. 2 no.4:525-526 '57. (MIRA 10:11)

1. Moldavskiy filial AN SSSR.
(Soluble glass)

MIGAL, P.K.

USSR/Physical Chemistry - Thermodynamics, Thermochemistry, Equilibria,
Physical-Chemical Analysis, Phase Transitions.

B-8

Abs Jour: Referat. Zhurnal Khimiya, No 3, 1958, 7180.

Author : P.K. Migal', V.S. Starchevskiy.

Inst : Kishinev University.

Title : Density and Surface Tension of System Methyl Alcohol -
Monoethanolamine.

Orig Pub: Uch. zap. Kishinevsk. un-ta, 1957, 27, 135-140.

Abstract: The density and surface tension (σ) of the system methyl alcohol - monoethanolamine (I) were studied at 0°, 10° and 20°. A compression of the system takes place when the components are mixed, which is maximum at 33 mol. % of I; this indicates the formation of the chemical compound $2\text{CH}_3\text{OH} \cdot \text{H}_2\text{NCH}_2\text{CH}_2\text{OH}$. The isotherms of σ also indicate the formation of the dissociating compound.

Card : 1/1

-54-

MIGAL, P.K.
USSR/Physical Chemistry - Thermodynamics, Thermochemistry, Equilibria,
Physical-Chemical Analysis, Phase Transitions. B-8

Abs Jour: Referat. Zhurnal Khimiya, No 3, 1957, 7179.

Author : P.K. Migal', D.P. Belotskiy.
Inst : Kishinev University.
Title : Viscosity and Surface Tension in System Ethyl Alcohol -
Aniline - Chloroform.

Orig Pub: Uch. zap. Kishinevsk. un-ta, 1957, 27, 119-125.

Abstract: The viscosity and surface tension (σ) were measured at 0° to 25° in the ternary system C_2H_5OH (I) - $C_6H_5NH_2$ (II) - $CHCl_3$ (III), in which III is an indifferent component. The results were treated by the method of divergences from additivity (N.A. Izmaylov, Zh. fiz. khimii, 1951, 25, 1070). It seems that a compound of I and II of the composition 1 : 1 is produced in the system at the expense of a hydrogen bond. The maximum divergence of σ from the additivity coincides with the composi-

Card : 1/2

-52-

USSR / Physical Chemistry - Surface Phenomena, Adsorption,
Chromatography, Ion Interchange.

B-13

Abs Jour : Ref Zhur Khim., No.1, 1958, No. 613.

Abstract : nal to the initial solution concentration.

Migal, P.A.
 USSR / Physical Chemistry - Surface Phenomena, Adsorption, B-13
 Chromatography, Ion Interchange.

Abs Jour : Ref Zhur Khim., No.1, 1958, No. 613.
 Author : P.K. Migal', T.V. Gorenko.
 Inst : Kishinev University.
 Title : Study of Dynamic Adsorption of Alcohols from Solutions.
 Orig Pub : Uch. zap. Kishinevsk. un-ta, 1957, 27, 111 - 118.

Abstract : Adsorption of isobutyl (I) and isoamyl (II) alcohols from toluene solutions on active aluminum oxide was studied under static and dynamic conditions. The solution composition was determined by the refractometric method. The static sorbent activity for I reaches $5.8 \cdot 10^{-4}$ and that for II reaches $6.3 \cdot 10^{-4}$ mole per g. Shilov's equation is applicable to the dynamic adsorption, as well as to the vapor adsorption; the filter work factor is inversely proportio-

Card: 1/2

Migal, P. K.

15
Preparation of water glass from infusorial earth by the wet method. P. K. Migal and O. A. Timofeeva. *Khim. Nauka i Prom.* 2, 825-8 (1967). The silicic acid in infusorial earth (I) consists of an amorphous and an activated variety. The latter is sol. in aq. NaOH solns. and is utilized in the process. The rate of leaching at 100° of I contg. 79.26% SiO₂ and 8.72% H₂O was detd. The optimum conditions were 10-15% NaOH and 1-hr. cooling, giving a product of d. 1.5-1.6. I. Benzonitz //

1-4E2c

MIGAL', P.K.; SYCHEV, A.Ya.

Physicochemical study of the system: cobaltous chloride - sodium
citrate in aqueous medium. Zhur.neorg.khim. 1 no.4:726-732 Ap
'56. (MLRA 9:10)

1.Kishinevskiy gosudarstvennyy universitet.
(Cobalt chlorides) (Sodium citrate)

1. Polarographic behavior of hydrogen ion in various pure and mixed solvents. II. Solutions in ethanol, butanol, acetone, and their mixtures with water. F. K. Migal, Ya. I. Turyan, and N. I. Bondarenko (Sverdlovsk, Russia). *Zh. fiz. Khim.* 40: 2301-2305, 1966. 5 refs. 21000. The polarographic behavior of HCl in EtOH, BuOH, MeCO, and their mixtures with H₂O was investigated in the presence of various concentrations of LiCl, NaClO₄, KCNS (in EtOH), and LiCl (in BuOH and MeCO) as supporting electrolytes. The diffusion current was found to be proportional to the HCl concentration (C_{HCl}) in EtOH and BuOH,

when $C > 1$ mole/l. In MeCO the diffusion current was larger in higher C_{HCl} at all HCl concentrations. A min. was found on the diffusion current-concentration curve. The mobility of H₃O⁺ ions in EtOH was equal to the K⁺ and Na⁺ mobilities at the min. diffusion current. In BuOH, HCl behaved like a weak acid in the presence of 0.1M LiCl. In EtOH, with the supporting electrolyte present, the half-wave potential was independent of C_{HCl}. The "polarographic H⁺ overvoltage" (the half-wave H potential against H electrode) (V_{1/2}) (C.A. 40, 5185) in EtOH and MeOH in the presence of all the supporting electrolytes except KCNS was lower than in H₂O by 0.1-0.2 v., while it was higher in alc. than in water in the presence of KCNS.

W. W. Stanbury

ILLEGIBLE

Physicochemical investigation of the aqueous system
NiSO₄-CaH₂O₂ P. K. Mikh and A. Yu. Syrov (Sverdlovsk
Univ. Krasnoyarsk), *Zh. Neorg. Khim.* 1, 1968, 24, 1030-1034,
63, 51, 8134. The formation of complexes in the NiSO₄-
CaH₂O₂-H₂O system was studied by conductometric,
photometric, and potentiometric methods. In acid or
neutral solutions, complex nickel citrate complex are formed
having compn. 1:1:1 and 1:2. The complex formation
leads to a lowering of the pH due to the formation of H⁺
from the hydroxyl group of the citrate. Increased concns.
and decreased temp. favor the formation of the complex
having a 1:2 compn. H. Ryzhik, Leningrad.

NiSO₄ P. K.

MIGAL', P. K.

USSR/Physical Chemistry. Thermodynamics, Thermochemistry, B-8
Equilibria, Physical-Chemical Analysis, Phase Transitions.

Abs Jour: Ref Zhur-Khimiya, No 5, 1957, 14706

Author : P. K. Migal', A. Ya. Sychev.

Inst : -

Title : Physical-Chemical Study of System Cobalt Chloride -
Sodium Citrate in Aqueous Medium

Orig Pub: Zh. neorgan. khimii, 1956, 1, No 4, 726-732

Abstract: A Physical-chemical study of the system cobalt chloride (I) - sodium citrate (II) in aqueous medium was carried out. The specific electric conductivity σ of the system I-II was measured at 15, 25 and 50° in the range of concentrations from 0.01 to 1.00 M. The isotherms of σ pass through a sharp minimum at the relation between I : II = 1 : 1, the breaking angle of the isotherm becomes sharper with the temperature rise. The isotherm minimum and the rectilinearity of both their branches is characteristic of concentration from 0.01 to 0.1 M; also a

Card 1/2

MIGAL, P. K.

✓ Kinetics of absorption of ethylene in sulfuric acid.
M. A. Kerdivarenko, P. K. Migal, and M. Kh. Kishinev-
skii. *J. Appl. Chem.* 28, 441-6 (1955) (Engl.
translation).—See *C.A.* 49, 15356b. B. M. R.

(2)

1/23/55

4

ILLEGIBLE

MIGAL, P.K.

Physicochemical analysis of binary systems: ethyl alcohol-aniline, ethyl alcohol-chloroform, and chloroform-aniline. P. K. Migal and D. P. Belotajki. *J. Gen. Chem.* U.S.S.R. 25, 1048-53 (1955) (Engl. translation).—See C.A. 50, 3885d. B. M. R.

PM
26

609

Migal' P.K.

USSR/Thermodynamics - Thermochemistry. Equilibria.
Physical-Chemical Analysis. Phase Transitions.

B-8

Abs Jour : Referat Zhur - Khimiya, No 6, 1957, 18523

Author : P.K. Migal', N.G. Glebko, A.I. Rastrenenko.
Inst : Chernovtsy University.

Title : Study of Aniline - n-Butyl Alcohol System by Cryoscopic Method.

Orig Pub : Nauch. zap. Chernivets'k. un-tu, 1955, 11, No 2, 3-12

Abstract : Cryoscopic measurements of solutions of aniline (I) and n-butyl alcohol (II) in benzene with the content of I increasing by 10 mol % from 0 to 100 mol % were carried out. The deviations of the experimental temperature depression of freezing from the computed in accordance with the solution composition as a sum of depressions by I and II were determined for total molalities of 0.6, 0.8, 1.0 and 1.2. It was shown that the maximum of deviations was near the composition 50% of I and 50% of II. It was surmised that there existed a compound of I and II of the
above composition.

Card 1/1

- 202 -

ILLEGIBLE

MIGAL' E. K.

AID P - 3417

Subject : USSR/Chemistry

Card 1/1 Pub. 152 - 2/18

Authors : Kerdivarenko, M. A., P. K. Migal' and M. Kh. Kishinevskiy

Title : Kinetics of absorption of ethylene by sulfuric acid

Periodical : Zhur. prikl. khim., 28, 5, 459-466, 1955

Abstract : The rate of absorption of ethylene was studied at 9, 20 and 40°C with sulfuric acid of 0 to 95%. With sulfuric acid of 80% and higher concentrations, the reaction rate increases more rapidly than it should according to the kinetic equation. This is ascribed to an increased hydration of H₂SO₄. Four tables, 7 diagrams, 7 references, 3 Russian (1944-54).

Institution : Laboratory of Physical Chemistry of the Kishinev State University

Submitted : F 3, 1954

Determination of sulfuric and nitric acids in the presence of each other. P. K. Migot and N. I. Troitzkaya. *Zinitskaya Lab.* 4, 171 2 (1936). The methods of Muller (*Ber. 35*, 1587 (1902); *Z. anorg. Chem.* 42, 417 (1903)) and Raushig (*Z. anorg. Chem.* 42, 617, 818 (1903)) gave equally accurate results, but the latter procedure is more convenient. Chas. Mann.

1ST ORDER																										2ND ORDER																									
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<div style="display: flex; justify-content: space-between;"> <div> <p>ca</p> </div> <div> <p>Processes and Properties Index</p> <p>Mechanism of reciprocal adsorption of gases and vapors P. K. Migal. <i>J. Gen. Chem. (U.S.S.R.)</i> 5, 611 (1935); cf. C. A. 29, 5000. The molar heat of adsorption, q_m, of a vapor on a free surface, is given by the equation $q_m = (1.75 \lg T + i - \lg P_s) 4.571 T + (C/\alpha) \Delta P$, where T is temp., i the Nerst const., P_s pressure of the said vapor, C molar heat capacity at T, α and β are coeffs. of thermal and mech. compression and P is the mech. force of compression. The heat effect of vapor-vapor adsorption is given by the expression $q_v = 4.571 T \lg$ $(P_s/P_s) + ((C/\alpha) - (C/\alpha)) \Delta P$, where the subscripts 1 and 2 refer to the 2 vapors involved. The heat effect of gas-vapor adsorption is given by the expression $q_{gv} =$ $(1.75 \lg T + i - \lg P_s) 4.571 T + ((C/\alpha) - (C/\alpha)) \Delta P$. S. I. Mudorsky</p> </div> <div> <p>γ</p> </div> </div>																																																			
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<p>Heat of adsorption of vapors from an air current on active carbon at 24°. P. K. Migal. <i>J. Gen. Chem.</i> (U.S.S.R.) 5, 197-210(1935).— The dynamic method was used in studying heat of adsorption of org. vapors on a nondegassed surface of active charcoal. The vapors studied were: CH₃Cl, CHCl₃, CCl₄, CH₃I, CS₂ and CH₃OH. It was found that for any given vapor mol. heat of adsorption is independent of its concn. in the air. The mol. heats of adsorption in the order of compds. given above are: 9800, 11,500, 11,600, 9800, 9850 and 9830.</p> <p>S. L. Madorsky</p>																																																	
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Ca

2

Adsorption of benzene vapor from a current of air. P. K. Migal and V. A. Golovchenko. *Izv. vuz. khim. Zhurnal* 2, 157-63 (1936). SiO_2 gel and active C differ in possessing high adsorptive capacity and velocity, resp.; a combination of the 2 adsorbents gives better results with respect to elimination of C_6H_6 from air than when each is taken separately. The activity of SiO_2 gels rises with increasing $[\text{HCl}]$ used for their pptn. B. C. A.

AS H-SLA METALLURGICAL LITERATURE CLASSIFICATION

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<p>62</p> <p style="text-align: right;">A-1</p> <p>Adsorption of benzene vapour from a current of air. P. K. Matal and V. A. GOLOVTSCHENKO (Trav. Inst. Chim. Charkov, 1938, 2, 157--163).— SiO_2 gel and active C differ in possessing high adsorptive capacity and velocity, respectively; a combination of the two adsorbents gives better results with respect to elimination of C_6H_6 from air than when each is taken separately. The activity of SiO_2 gels rises with increasing $[\text{HCl}]$ used for their pptn. R. T.</p>																																																			
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BC

1-1

Mechanism of displacement adsorption of gases and vapours. P. K. MISHAL (J. Gen. Chem. Russ., 1935, 8, 614—621).—The molar heat effect observed when an adsorbed gas is replaced by a vapour (CHCl_3 , CCl_4 , MeOH , CS_2 , EtH , EtOH , Et_2O) may be expressed by $q = \lambda + [(C_2/u_2) - (C_1/u_1)]\beta P$, where λ is the heat of condensation of 1 g.-mol. of vapour, C_1 and C_2 are the sp. heats of the gas and vapour, respectively, u_1 and u_2 are the coeff. of thermal compression, β is the compression coeff., and P is the deformative force due to the adsorbent. When the capillary activity of the second adsorbate is $>$ that of the first, adsorption on the first adsorbate, but not displacement, occurs, but under converse conditions, adsorption takes place with replacement of the first adsorbate.

R. T.

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

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<p>Heat of adsorption of vapours from a current of air by active charcoal at 24°. P. K. MIGAL (J. Gen. Chem. Russ., 1935, 8, 197-210).—The heat (q)-time curves, after a short induction period, are rectilinear for MeCl, CHCl_3, CCl_4, MeI, CS_2, and MeOH corresponding with $q = kvc(t - t_0)$, where c is the concn. of vapour, v its rate of flow, and t_0 is the time at the end of the induction period.</p> <p style="text-align: right;">R. T.</p>																																																			
<p>ASTM-314 METALLURGICAL LITERATURE CLASSIFICATION</p>																																																			

MIGAL', O.K. [Myhal', O.K.], student biolog.fakul'teta; TUL'CHINSKAYA,
V.P. [Tul'chyns'ka, V.P.], nauchnyy rukovoditel', prof.

Effect of plant extracts on the growth of bacterial cultures.
Pratsi Od.un. Zbir.stud.rob. 149 no.5:169-172 '59.
(MIRA 13:4)

1. Chlen-korrespondent AN USSR (for Tul'chinskaya). 2. Odesskiy
gosudarstvennyy universitet.
(EXTRACTS) (BACTERIA)

ARINSHTEYN, A.I., kand. sel'skokhoz. nauk; MIGAL', N.S.

Effect of the quantity of hemp pollen grains on their germination,
the growth of pollen tubes, and the yield of hybrid seeds. Agro-
biologiya no.1:151-153 Ja-P '65. (MIRA 18:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut lubyanykh
kul'tur, Glukhov.

MIGAL', N.K., prof. doktor fiziko-matem. nauk

Comments on I.S. Morin's article "Method for studying the
figure of the earth without recourse to the normal field."

Izv. vys. ucheb. zav.; geod. i aerof. no.6:111-114 '63

(MIRA 17:7)

1. L'vovskiy politekhnicheskii institut.

MIGAL', N.A., prof. dokt. fiziko-meteor. nauk

Comments on Dr. Migal's article "Method for studying the
figure of the earth without recourse to the normal field."
Izv. vys. ucheb. zed. i nauch. i seraf. no. (1111-1111 '63)

(MIRA 17:7)

1. L'vovskiy politekhnicheskiy institut.

Chronicle

SOV/6-60-1-16/17

discussed the development of methods of measuring lengths[✓] of distances. V. I. Rudskiy reported on methods used in the realization of geodetic basic work in China and Syria. The Conference[✓] was attended by representatives of other schools of higher learning and geodetic organizations of the L'vovskiy ekonomicheskii rayon (L'vov Economic Rayon).

Card 2/2

MIGAL, N.K.

SOV/6-60-1-16/17

3(4)
AUTHOR: None Given

TITLE: Chronicle

PERIODICAL: Geodeziya i kartografiya, 1960, Nr 1, pp 78-79 (USSR)

ABSTRACT: The 18th Scientific-technical Conference was held at the L'vovskiy politekhnicheskii institut (L'vov Polytechnic Institute) from October 26 to 28, 1959. It was devoted to the 20th anniversary of the reunion of the West Ukrainian region with the USSR. 9 reports were delivered in the geodetic section: N. K. Migal spoke on the "Generalized Formula of the Theory of the Earth's Shape". T. N. Chalyuk presented formulas for the accuracy predetermination in the surveying of technical buildings. I. F. Monin described his method of determining plumb-line deviations in the mountains. A. S. Lisichanskiy presented a variant of a new classification of cartographic projections. Yu. N. Pankrat'yev dealt with photographic theodolite surveys of the Northwest Chink on the Ust'yurt Plateau. V. I. Kibal'nikov spoke on "Application of Photogrammetry in Geology". A. Ye. Sumarokov reported on the contents of the manual for geodetic professions concerning the organization and economy of topographic-geodetic work. O. S. Makar

Card 1/2

On determining the Earth's shape ...

S/035/61/000/005/037/042
A001/A101

gravity force on the geoid is expressed as follows:

$$g = g_0 \left[1 + \beta \sin^2 u + \left(\frac{1}{4} \epsilon^2 \beta - \beta_1 \right) \sin^2 2u \right] + \Delta g.$$

$$g = \frac{a\omega^2}{g_0}$$

Here a is semimajor axis; $S(\psi)$ is Stokes function; $d\sigma$ is surface element of the unit sphere; ω is angular velocity of Earth rotation; $e, 1$ are first and second eccentricities of ellipsoid; u is reduced latitude; λ is longitude; A, B, C , are constants characterizing the orientation of ellipsoid; D is constant characterizing its size. Analogous formulae are obtained for h as a function of geographic and geocentric latitudes. Numerical values of coefficients for Krasovskiy's ellipsoid and Gel'mert formula are calculated. It is mentioned that in the article by D. V. Zagrebin (Trudy ITA, 1952, no. 1) on page 114 and the subsequent ones, function $\psi_2(\psi)$ entering all the functions of Zagrebin's final formula was determined incorrectly.

M. Yurkina

[Abstracter's note: Complete translation]

Card 2/2

S/035/61/000/005/037/042
A001/A1013,9000
AUTHOR:

Migal', N.K.

TITLE:

On determining the Earth's shape without using the normal gravitational field

PERIODICAL:

Referativnyy zhurnal. Astronomiya i Geodeziya, no. 5, 1961, 30, abstract 5G198 ("Nauchn. zap. L'vovsk. politekhn. in-t. Ser. geod.", 1959, no. 5, 79 - 86)

TEXT:

On the basis of his earlier work (Nauchn. zap. L'vovsk. politekhn. in-t. Ser. geod., 1949, no. 15, 1) the author derived the following formula for the difference between the regularized geoid and ellipsoid with a relative error of the order of oblateness

$$\begin{aligned}
 -h = & \frac{a}{4\pi g_s} \int \Delta g S(\psi) d\sigma + a \left[\left(\beta - \frac{5}{2} q + \frac{1}{2} i^2 + \frac{18}{7} q i^2 - \right. \right. \\
 & \left. - i^2 \beta + \frac{3}{7} e^2 \beta - \frac{12}{7} \beta_1 - \frac{5}{7} i^4 \right) \sin^2 u + \\
 & \left. + \left(\frac{1}{6} i^2 \beta + \frac{4}{3} \beta_1 - \frac{1}{3} e^2 \beta - \frac{1}{24} i^4 \right) \sin^4 u \right] + \\
 & + A \sin u + B \cos u \cos \lambda + C \cos u \sin \lambda + D;
 \end{aligned}$$

Card 1/2

22400

MIGAL', N.K.

Secular wandering of the poles of rotation of the deforming earth.
Nauch. zap. LPI. Ser. geod. no.4:3-14 '58. (MIRA 14:7)
(Earth--Rotation)

MIGAL, N.K.

14-1-318

Translation from: Referativnyy Zhurnal, Geografiya, 1957, Nr 1, p. 27 (USSR)

AUTHOR: Migal', N. K.

TITLE: Ocean Transgression and Regression (Otnositel'no transgressiy i regressiy morya)

PERIODICAL: Nauch. zap. L'vovsk. politekhn. in-t, 1955, Nr 33, pp. 87-90

ABSTRACT: A map showing the present relief of the earth was prepared taking into account the respective ocean levels of the contemporary and Paleogene eras (Ref. 317). This map indicates the outline of Paleogene oceans. N. M. Strakhov's map in Osnovy istoricheskoy geologii (Basis of Historical Geology, M.-L, Gosgeolizdat, 1948) is shown for comparison. The location of lands and oceans coincides almost completely on both maps, although the author did not reduce the contemporary relief of the Earth to the scale of the relief of the Paleogene era.

ASSOCIATION: L'vov Polytechnical Institute (L'vovsk. Politekhn. in-t)

Card 1/1

MIGAL, N. K.

"Determination of Latitude and Azimuth From Two Observations of the Same Stars"
Nauch. zap. Lvovsk. politekhn. in-ta, 18, No 2, 1954, 71-74

A case in which the coordinates of the stars are unknown and the time of observation not recorded is applied to determination of the local latitude and azimuth from two observations. The values sought are obtained from solutions of two spherical triangles connecting the pole of the universe, the zenith, and the star. An example is given by using a 20" theodolite. (RZhAstr, No 10, 1955)

SO: Sum - No. 787, 12 Jan 56

MIGAL, N.K.

Translation from: Referativnyy Zhurnal, Geografiya, 1957, Nr 1, p. 27 (USSR) 14-1-317

AUTHOR: Migal', N. K.

TITLE: The Configuration of the land surface and Geotectonics (Figura zemli i geotektonika)

PERIODICAL: Nauchn. zap. L'vovsk. politechn. in-ta, ser. geod., 1954, Nr 2, pp. 94-123

ABSTRACT: It is pointed out that one of the main causative factors in ocean regressions and transgressions is soil denudation and the resulting changes in the solid part of the earth crust. The evolution of the Earth since the Paleogene period is estimated. A paleogeographic map of this period is given with figures indicating how much the present ocean level should be raised or lowered to approximate that of the Paleogene period.

ASSOCIATION: L'vov Polytechnical Institute (L'vovsk Politekhn.in-t.)

Card 1/1

MIGAL', N. K.

The Committee on Stalin Prizes (of the Council of Ministers USSR) in the fields of science and inventions announces that the following scientific works, popular scientific books, and textbooks have been submitted for competition for Stalin Prizes for the years 1952 and 1953. (Sovetskaya Kultura, Moscow, No. 22-40, 20 Feb - 3 Apr 1954)

<u>Name</u>	<u>Title of Work</u>	<u>Nominated by</u>
Migal', N. K.	"The theory of Common Determination of the Figure and Dimensions of the Earth"	L'vov Polytechnic Institute

SO: W-30604, 7 July 1954

MIGAL', N. K.

"Theory of the Joint Determination of the Earth's Figure and Dimensions."
Sub 28 Feb 51, Geophysics Inst Acad Sci USSR.

Dissertations presented for science and engineering degrees in Moscow
during 1951.

SO: Sum. No. 480, 9 May 55.

MIGAL24N8

600

1. MIGAL', N.

2. USSR (600)

"Choice of the equatorial constant in the normal formula for gravity", Astron. Zhur.
16, No 2, 1939. Gravimetric Observatory, Academy of Science USSR, Poltavo.

9. ~~SECRET~~ Report U-151, 23 Oct 1951

ILLEGIBLE

MIGAL, M.

Migal, M. "On the Determination of the Figure of the Geoid from Anomalies of the Horizontal Gradient of Terrestrial Gravity. Sobremennyye Problemy Geofiziki - Moscow, vol. 16, No. 1, 1977, pp. 41-50.

MIGAL', N.D.

Evaporation of water and the viability of hemp pollen.
Fiziol.rast. 12 no.6:1090-1092 N-D '65.

(MIRA 13:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut lubyanykh
kul'tur, Glukhov, Sumskaya oblast'. Submitted November 22,
1964.

MIGAL', I.A., vrach

Clinical biochemical parallels as indices of the effectiveness
of radical treatment of chronic suppurative diseases of the
lungs. Sbor. nauch. rab. Sar. gos. med. inst. 44:275-280 '64.
(MIRA 18:7)

1. Iz kafedry fakul'tetskoy khirurgii lechebnogo fakul'teta
(zav. - prof. I.M. Ioptev'yan [deceased]) i kafedry gosital'noy
terapii lechebnogo fakul'teta (zav. - prof. L.S. Shvarts) Sara-
tovskogo meditsinskogo instituta (rektor - dotsent N.R. Ivanov).

KUNITSINA, T. A.; MIGAL', L. A.

Significance of thoracotomy in the diagnosis and treatment of
pulmonary and extrapulmonary surgical diseases. Grud. khir. no.5:
75-81 '61. (MIRA 15:2)

1. Iz fakul'tetskoy khirurgicheskoy kliniki lechebnogo fakul'teta
(dir. - prof. I. M. Popov'yan) Saratovskogo meditsinskogo instituta
(dir. - dotsent N. R. Ivanov)

(LUNGS--DISEASES) (CHEST---SURGERY)

MIGAL, K G.

LEBEDEV, S.I., prof., doktor biolog.nauk, otv.red.; KOVBASYUK, S.M., dotsent, kand.istor.nauk, red.; PAZYUK, L.I., dotsent, kand.geologo-mineral.nauk, red.; KIRILLOV, Ye.A., prof., doktor fiziko-matemat.nauk, zasluzhennyy deyatel' nauki USSR, red.; TSESEVICH, V.P., prof., doktor fiziko-matemat.nauk, red.; LEONOV, I.G., dotsent, kand.istor.nauk, red.; VOROB'YEV, A.I., prof., doktor biolog.nauk, red.; GAVRILOV, N.I., prof., doktor fiziko-matemat.nauk, red.; MOROZOV, A.A., prof., doktor khim.nauk, red.; DANILENKO, K.Ye., dotsent, kand.filolog.nauk, red.; MIGAL', K.G., dotsent, kand.istor.nauk, red.; SMIRNOV, A.M., dotsent, kand.geograf.nauk, red.; BABICH, N.M., tekhn.red.

[Scientific yearbook for 1956] Nauchnyi ezhegodnik 1956 g. Odessa, 1957. 388 p. (MIRA 12:4)

1. Odessa. Universitet. 2. Deystvitel'nyy chlen Ukrainskoy Akademii sel'skokhoz.nauk, zaveduyushchiy kafedroy fiziologii rasteniy Odesskogo gosudarstvennogo universiteta im. I.I.Mechnikova (for Lebedev). 3. Zaveduyushchiy kafedroy istorii Ukrainskoy SSR Odesskogo gosudarstvennogo universiteta im. I.I.Mechnikova (for Kovbasyuk). 4. Zaveduyushchiy (Continued on next card)

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ACCESSION NR: AR3000383

made of Sn, Pb, and In. Electrodes of Aquadag and silver turned out to be non-ohmic. It has been established that the specific resistivity of layers of thickness 0.6 μ is independent of the thickness. This is attributed to the increase in the dimensions of the crystalline grains with increasing thickness of the layer, and also to the production of surface absorption states by the sorbed oxygen. The specific resistivity of layers of thickness less than 0.5 μ is on the order of 0.1 ohm-cm, corresponding to its value for bulky specimens of indium phosphide. On the basis of the values of the coefficients of transmission and reflection of light with wavelengths 0.7 to 1.3 micron, spectral absorption and refraction characteristics were obtained. The width of the forbidden zone was determined from the edge of the principal absorption and was found to be 1.27 eV at room temperature. The value of the refractive index at wavelengths greater than 1.3 micron is 3.9. Yu. Ukhanov.

DATE ACQ: 14May63 ENCL: 00 SUB CODE: PH

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58

SOURCE: RZh. Fizika, Abs. 4E487

AUTHOR: Kot, M. V.; Migal', BV. P.

TITLE: Some electrical and optical properties of thin layers of indium phosphide

CITED SOURCE: Tr. po fiz. poluprovodnikov. Kishinevsk. un-t, vyp. 1, 1962, 105-109

TOPIC TAGS: Semiconductors, thin layers, indium phosphide, electrical and optical properties

TRANSLATION: Thin layers of indium phosphide were obtained by evaporating in vacuum either bulky specimens of polycrystalline indium phosphide, or else P and In separately, on glass substrates. The most stable layers were obtained by the second method of evaporation on a substrate heated to 260° C WITH SUBSEQUENT ANNEALING AT THE SAME TEMPERATURE FOR TWO HOURS. The thickness of the layers was measured with the aid of an interference microscope. The measurement of the specific resistivity of layers of the n-type was with the aid of electrodes

Card 1/2

MIGAL', A.K.

Vitamin B12 in mass invertebrates of the northwestern part
of the Black Sea. *Gidrobiol.zhur.* 1 no.5:53-55 '65. (MIRA 18:11)

1. Odesskoye otdeleniye Instituta biologii yuzhnykh morey
AN UkrSSR.

MIGAL', A.K. [Myhal', O.K.]

Study of vitamin B₁₂ in invertebrates (mussels and shrimps) of the Black Sea. Ukr. biokhim. zhur. 35 no.2:251-255 '63. (MIRA 17:9)

1. Laboratory of Biochemistry of the Odessa Biological Station of the Institute of Hydrobiology, Academy of Sciences, Ukrainian S.S.R.

MIGACZOWA, Teresa

Use of vitamin B12 in optic neuritis. Klin.oczna 31 no.4:349-352 '61.

1. Z Kliniki Okulistycznej Slaskiej AM w Zabrze Kierownik: prof. dr
med. M. Madroszkiewicz.

(VITAMIN B12 ther) (OPTIC NERVE dis)
(NEURITIS ther)

MIGACZOWA, Teresa; NIEBROJ, Tadeusz

Effect of hyaluronidase on synechia iridis in a rabbit. Klin.
oczn. 30 no.2:143-155 '60.

1. Z Kliniki Chorob Oczu Sl. A.M. w Zabrze. Kierownik: prof.dr
med. M. Madroszkiewicz.
(IRIS dis.)
(HYALURONIDASE pharmacol.)

MIGACZOWA, Halina (Wroclaw)

"Population geography of East Siberia." Reviewed by Halina
Migaczowa. Czasop geograf 34 no.3:313-314 '63.

MIGACZOWA, Halina (Wroclaw)

The population of France. Czasop geograf 34 no.3:293-294
'63.

MIGACZOWA, Halina (Wroclaw)

"Economic and political geography of foreign countries" by I.N. Smidowicz [Smidovich, I.N.]. Reviewed by Halina Migaczowa. Czasop geograf 33 no.3:374 '62.

MIGACZOWA, Halina (Wroclaw)

The 40th anniversary of Professor August Zierhoffer's scientific work. Czasop geograf 33 no.2:281-285 '62.

MIGACZOWA, Halina, dr. (Wroclaw 21, Al.Piastow 37)

"The Lyons region". By J.Labasse and M.Laferrere. Reviewed
by H.Migaczowa. Czasopismo geograficzne 32 no.3:365-366 '61.

1. Uniwersytet, Wroclaw.

MIGACZ, Wladyslaw (Wroclaw)

Wladyslaw Migacz

A bibliography of Professor Jozef Wasowicz's works. Czasop
geograf 36 no.1:21-75 1955.

Wroclaw
1955

MIGACZ, Wladyslaw (Wroclaw)

"Present state and technical development trends of cartography in the United States "by D.S. Rugg. Reviewed by Wladyslaw Migacz. Czasop geograf 34 no.4:414-416 '63.

MIGACZ, Wladyslaw (Wroclaw)

Photogrammetric maps of glaciers. Czasop geograf 34 no.3:
297-299 '63.

MIGACZ, Wladyslaw (Wroclaw)

State and development possibilities of cartography. Czasop
geograf 34 no.2:172-174 '63.

MIGACZ, Wladyslaw (Wroclaw)

"Geographical atlases" by W.G. Churkin [Churkin, V.G.]. Reviewed by
Wladyslaw Migacz. Czasop geograf 33 no.3:380-382 '62.

MIGACZ, Wladyslaw, doc. dr. (Wroclaw 21, Al. Biastow 37)

The 175th anniversary of the Gotha Publishing House. Czasopismo geograficzne 32 no.3:348-349 '61.

1. Uniwersytet, Wroclaw.